

dynamically matching custom information stored on distributed databases with information that users hold in a user device on topics of interest.

2. The method of claim 1 wherein the custom information is stored as capsules of data having a wrapping field that includes fields that contains property characteristics of the capsule and a content field that contains actual information to be shared or sent.

3. The method of claim 1 wherein matching further comprises:  
matching wrapper information from a received capsule, the  
wrapper information including information that determines the  
use of the information content of the capsule.

4. The method of claim 2 wherein matching wrapper information matches information about the capsule owner, the time span of the capsule, the intended audience for the capsule.

5. The method of claim 2 wherein matching wrapper information includes matching rules that determine which pieces of information are to be matched, what information is to be filled in, and what other actions are to occur if a match occurs.

6. The method of claim 2 wherein matching further comprises:  
matching content information contained in the capsule.



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a process to wrap content with control information designating ownership of the content, the time span the content is valid, and rules specifying how content is to be matched.

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13. The device of claim 10 wherein the user device is a handheld computing device.



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14. The device of claim 10 wherein the user device is a portable, wireless device.

15. A system to enable a person to interact in both a physical world and an electronic (virtual) world comprises:

5 a server that delivers news and information, and provide virtual stores and online interactions through wired and wireless networks; and

a client user device comprising:

a database of personal interests; and

10 a process that either offers and/or requests services and information based on the personal interests, said process comprising:

a process to wrap content with control information designating ownership of the content, the time span the content is valid, and rules specifying how content is to be matched.

16. The system of claim 15 wherein the control information includes rules to specify what information is to be filled in.

17. The system of claim 15 wherein the control information further comprises:

a visibility setting for each shared data package.

18. The system of claim 15 wherein the visibility settings further comprise:

a visibility setting to receive information and services.

25 19. The system of claim 15 wherein the visibility settings further comprise:

a visibility setting to receive information and services



Sub A' 7 wherein detection by third parties is not permitted while receiving information.

20. The system of claim 15 wherein the visibility settings further comprise:

5 a visibility setting to receive information and services wherein detection by third parties is not permitted while receiving information.

21. The system of claim 15 wherein the user device is a handheld computing device.

10 22. The system of claim 15 wherein the databases include information pertaining to general interests on topics and particular items with specific properties.

23. The system of claim 15 wherein the server comprises:  
a matching process that matches information from the client with a variety of different information from other hosts that are also sending information to server.

24. The system of claim 15 wherein the information sent by the servers can be from servers that have a physical presence in the area of the client.

20 25. The system of claim 15 wherein the information sent by the hosts are for services that are generic services that do not have a physical presence in the physical location occupied by the client.

26. A server system, comprises:

25 a matching process that matches information from a client



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with information from other hosts that are also sending  
information to server, said matching process comprising:  
matching wrapper information from a received  
capsule, the wrapper information including information  
that determines the use of the information content of the  
capsule.

27. The server of claim 26 wherein the matching process  
further comprises:

a matching process to match content of the received  
capsule with content from other sources of content.

28. The server of claim 26 wherein the server offers and  
requests information, and also services.

29. A method for conducting commerce where information and  
services are provided to customers comprises:

selectively activating shareable database capsules from  
information contained in personalized, shared databases;

distributing the shareable capsules over a network  
communications medium as matchable capsules;

matching the matchable capsules with other complementary  
matchable capsules; and

making the existence and results of a match of a pair of  
matchable capsules visible only if matched capsules have  
compatible visibility settings.

30. The method of claim 29 wherein the shareable capsules  
include offers or requests for information or services.

31. The method of claim 29 wherein the customers include  
individual persons, information providers, retail stores and



32. The method of claim 29 wherein the activation of shared items can be based upon the location of the customer.

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35. The method of claim 29 wherein the distribution of shared items can be directly between local wireless or wired devices.

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38. The method of claim 29 wherein the capsules have ownership, location, life span, binding and transmittal details.

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41. The method of claim 29 wherein the matching process



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screens visibility of the results of a request or offer.

42. The method of claim 29 wherein the capsule specifies the allowable audience and hosts to conduct a match with.

5 43. A method for maintaining privacy in exchange of data comprises:

attaching a directional visibility flag to a request or offer for information or services;

distributing the request or offer;

10 matching the visibility setting of a request or offer to complementary items in the complementary one of the request or offer;

processing the match in accordance with the visibility specification to prevent any information about the existence or results of the match from being communicated to contrary to the visibility flags.

44. The method of claim 43 wherein matching further comprises:

matching the request or offer to complementary offers or requests.

20 45. The method of claim 43 wherein the visibility flag can be set to denote that only the originating owner can be notified of the offer or request and its matching results.

25 46. The method of claim 43 wherein the visibility flag can be set to denote that the originating owner does not need to receive a response but owners of matched data can see the result.



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47. The method of claim 43 wherein the visibility flag can be to denote that both the originating owner and the owner of the matching data can be made aware of the match.

48. The method of 43 wherein the match process can be conducted using a secure matching process that hides the data and match results from inspection outside the process.

49. The method of 43 wherein the identity of the owner is shielded via a handle known to a trusted host.

50. The method of claim 43 wherein the contents portion is comprised of matchable, fillable and shareable elements.

51. A computer readable medium storing a data structure that represents a shareable database capsule comprises:

a content field that contains offers and requests for information and services; and

a transmittal information field that contains information to control the distribution, matching and privacy of the sharing of the database capsule.

52. The computer readable medium of claim 51 wherein the transmittal information field comprises:

binding information, which specifies the audience to which the content information is directed, and visibility of a matching result of the capsule with a complementary capsule.

51. The computer readable medium of claim 51 wherein the transmission can be an offer or request for information, activity, connection, calculation, or storage.



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52. The computer readable medium of claim 51 wherein visibility can specify the direction of information flow.

53. The computer readable medium of claim 51 wherein the transmittal information field comprises:

5 ownership information;  
location information;  
life span information; and  
details of the transmission as an offer or request for information or services.

10 54. The computer readable medium of claim 51 wherein the contents portion is comprised of shareable, matchable and fillable elements.

55. A system comprises:

a server that includes a matching process that matches information from a client with information from other hosts that are also sending information to the server, the matching process comprising:

a matching process to match wrapper information from a received capsule, where the wrapper information includes information that determines the use of the information content of the capsule;

a client user device to interact with the server device, the client user device comprising:

a database of personal interests; and

25 a process that either offers and/or requests services and information based on the personal interests, the process comprising:

a process to wrap content with control information designating ownership of the content, the time span the



content is valid, and rules specifying how content is to be matched

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